

SWAC Subcommittee on Mercury Management

May 10, 2007

Agenda

1. Distribute and review disposal prohibition language – 6I and 6L
2. Current thinking on regulation
3. Residential collection infrastructure
 - a. Municipal infrastructure
 - b. Manufacturer's collection plans
 - c. Retail take-back
 - d. Gap analysis
4. List of products likely to see at a municipal collection
5. Schedule next meeting

Excerpt from Chapter 190 of the Acts of 2006
AN ACT RELATIVE TO MERCURY MANAGEMENT

Section 6L.

- (a) No person, household, business, school, healthcare facility or state or municipal government shall knowingly dispose of a mercury-added product in any manner other than by recycling, disposing as hazardous waste or using a method approved by the department.
- (b) The department shall implement an education program. This program shall include, but not be limited to, working with municipalities and waste haulers to educate the citizens of the commonwealth about mercury-added products and their proper disposal, including creating signs to post at transfer stations, landfills, recycling centers and municipal buildings.
- (c) Mercury from mercury-added products shall not knowingly be discharged into water, wastewater treatment or wastewater disposal systems unless it is done in compliance with applicable local, state and federal requirements.
- (d) No person shall knowingly send a multi-component product that contains mercury to a scrap recycling facility for recycling without first removing the mercury-added product or products. Notwithstanding the forgoing, a scrap recycling facility may agree to accept a multi-component product that has not been intentionally flattened, crushed or baled knowing it contains mercury-added product or products. If accepted, the scrap recycling facility shall be responsible for removing such product or products and recycling them or disposing of them as hazardous waste.
- (e) Mercury-added formulated products that are cosmetic or pharmaceutical products subject to the regulatory requirements of the Federal Food and Drug Administration relating to mercury are exempt from this section.

Section 6L. A solid waste collector shall refuse to collect the contents of a solid waste container that the collector knows or reasonable should know contains 1 or more mercury-added products unless such solid waste is collected for the purpose of being reused, recycled or properly disposed of as hazardous waste or otherwise managed to ensure that the mercury does not become mixed with other solid waste or wastewater.

Excerpt from Chapter 190 of the Acts of 2006
AN ACT RELATIVE TO MERCURY MANAGEMENT

Section 6J.

- (a) No person shall sell or offer to sell or distribute a mercury-added product in the commonwealth unless the manufacturer has created and filed with the department a convenient and accessible collection plan for mercury-added products at the end-of-life, including a system for the direct return of the mercury-added product to the manufacturer or a collection and recycling plan, in accordance with chapter 21C and the department's regulations concerning hazardous waste, using new or existing collection systems. The plan shall be approved or certified, as determined by the department, and shall be implemented by the manufacturers.
- (b) Where a mercury-added component is part of another product, the collection system must provide for collection of the mercury-added component or collection of both the mercury-added component and the product containing it.
- (c) Every manufacturer of mercury-added products sold or distributed in the commonwealth shall be financially responsible for such collection and recycling systems.
- (d) (1) Manufacturers of mercury-added lamps shall satisfy the requirements of this section if, individually or as a group, they develop an education plan for consumers and municipalities for the proper use and disposal of mercury-added lamps. The plan shall include, but not be limited to:
 - (i) Information regarding the economic and environmental benefits of mercury-added lamps;
 - (ii) Information regarding the harms mercury can cause to the environment and to human health;
 - (iii) Information regarding proper disposal and recycling methods for mercury-added lamps; and
 - (iv) Information, provided to consumers through the use of a toll-free telephone number, internet web sites, information labeled on the device, information included in the packaging or information accompanying the sale of mercury-added lamps, describing where and how to return, recycle or dispose of mercury-added lamps. Information provided to consumers shall include the meaning of the chemical symbol "Hg" and other symbols and non-English terms.
- (2) Every manufacturer, either individually or as a group, shall annually certify in writing that they are implementing the plan in accordance with this section and provide to the department the total number of mercury-added lamps sold in the commonwealth in that calendar year. The statewide mercury-added lamp recycling rates shall be 30 per cent by December 31, 2008, 40 per cent by December 31, 2009, 50 per cent by December 31, 2010, 70 per cent by December 31, 2011, and 70 per cent each year thereafter. The department shall adopt regulations to implement these rates. For the purposes of this section, the statewide mercury added-lamp recycling rate shall be based upon the total number of mercury added-lamps in the commonwealth available for recycling, as determined by the department. Every manufacturer, either individually or as a group, shall annually submit a report that

identifies progress toward these recycling rates. The department shall conduct audits, at least annually, to determine if manufacturers are complying with this section.

- (e) Failure to achieve any of the recycling rates established by or pursuant to paragraph (2) of subsection (d) shall obligate the manufacturers of mercury-added lamps as a group to make available not more than \$1,000,000, per year of non-compliance, to the department for grants to municipalities or regional authorities to facilitate meeting recycling rates. The department shall establish, by December 31, 2007, a process for determining the mercury-added lamp recycling rate and the aggregate and individual funding commitments based on information that includes, but is not limited to, the actual recycling rate compared with the target recycling rate, each manufacturer's lamp market share in the commonwealth and specific manufacturer program effectiveness. The department shall deposit the funds received from manufacturers into an expendable trust, in accordance with section 6 of chapter 6A and any applicable regulations, for the purpose of grants to municipalities and regional authorities and shall administer the grant program to municipalities and regional authorities. Manufacturers' individual contributions shall not exceed their respective market shares of lamps sold in the commonwealth.
- (f) Nothing in this section shall prohibit retailers, distributors, wholesalers or any other group from creating and implementing a collection plan for mercury-added lamps or any other mercury-added product.
- (g) This section shall not apply to mercury-added button cell batteries, motor vehicles or motor vehicle components.
- (h) Mercury-added formulated products intended to be totally consumed in use, such as reagents, cosmetics, pharmaceuticals and other laboratory chemicals, shall be exempt from this section.
- (i) This section shall not apply to refurbished medical equipment or products where the only mercury contained in the product comes from a removable mercury-added button cell battery or a mercury-added lamp.

SWAC Mercury Management Workgroup Meeting Notes – May 10, 2007

Attendees: Tina Klein, Lori Segall, Greg Cooper, Sarah Weinstein, Bill Rennie, Dan Peters, Patti O'Hara, Chip Laffey, Mike Lavin, Andrea Adams

Distribute and review disposal prohibition language – 6I and 6L

- Massachusetts is not the first state to enact a prohibition on disposing of mercury products as solid waste.
- **Action:** Tina to follow-up with IMERC. Do they have a summary of disposal ban provisions with their effective dates?

Current thinking on regulation

- **Action:** Does 21H define “Solid Waste Collector”?
- We spent a good portion of the meeting discussing the potential location (chapter and section) to house these regulations and acknowledged that some of the products covered by the disposal prohibition are not currently classified in the same way. Some are universal waste, some hazardous waste and some solid waste.
- It is not necessary to amend Solid Waste regulations (CMR 19) because facilities already have contingency plans for when hazardous material arrives at the facility.
- **Action:** Ensure all facilities have HW contingency plans
- Regardless of where the regulations end up, there was agreement that the practical thing, if possible, would be to manage all mercury products to similar performance standards and as if they were Universal Waste.
- In addition to regulations, MassDEP may need to develop guidance for facilities and for haulers about how to handle mercury products when they get them.
- This disposal restriction applies to households, unlike RCRA/MGL c. 21C which exempts households

Residential collection infrastructure: Municipal infrastructure, Manufacturer's collection plans, Retail take-back, Gap analysis

- Outreach, outreach, outreach. How can MassDEP assist in educating the public about products that contain mercury, and the disposal ban?
- Training of the facility operators and haulers will also be an important component. SEMASS is doing Mercury Trainings each year as part of their Material Separation Plan.
- A suggestion was made to look at getting to the inventory of legacy products through contractors likely to be coming in contact with them
- Lack of municipal labor will be an inhibitor for some municipalities. SEMASS has found that communities that do not have a position dedicated to solid waste and recycling minimally participate, if at all, in the Material Separation Plan programs.
- Suggestion was made to focus on encouraging and promoting regional groups
- Municipalities will need access to the list of manufacturer's collection plans.

List of mercury-added products from the residential sector

Below is the beginning of a list of items affected by the disposal restriction.

*****Please send additions to the list to tina.klein@state.ma.us ***

< ----- Currently handled as ----- >		
Universal Waste	Solid Waste	Hazardous Waste
Thermostat	Flat Panel TVs	Barometers
Thermometer	Flat Panel Computer monitors	Elemental Mercury
Button Battery	Portable DVD players	
Lamps	Handheld gaming devices	
Sphygmomanometer	Toys with irremovable button batteries	
Electrical Switches	Projectors (some)	
Chest Freezers	CFL Lamps	
Oven (some)		
Bilge pump		
Sump pumps		

Schedule next meetings

- Thursday May 31; same time – 12:00pm to 2pm; focus on regulations
- Third meeting, to be scheduled in June, will focus on collection infrastructure

Regulations needed to Ban the Disposal of Mercury Bearing Products

Background

The Mercury Management Act prohibits the disposal of mercury products in solid waste. This restriction is specified in two sections of the Act.

Section 6L. (a) No person, household, business, school, healthcare facility or state or municipal government shall knowingly dispose of a mercury-added product in any manner other than by recycling, disposing as hazardous waste or using a method approved by the department.

Section 6L. A solid waste collector shall refuse to collect the contents of a solid waste container that the collector knows or reasonable should know contains 1 or more mercury-added products unless such solid waste is collected for the purpose of being reused, recycled or properly disposed of as hazardous waste or otherwise managed to ensure that the mercury does not become mixed with other solid waste or wastewater.

As part of the MassDEP's responsibility to implement the Act, MassDEP needs to codify the prohibition on disposal through enforceable regulations.

Issue:

MassDEP needs to determine the regulatory method by which to restrict the disposal of mercury products in solid waste.

Options

BWP has identified two options for implementing the disposal restriction on mercury products:

1. Incorporate into 310 CMR 19 – Solid Waste Regulations under 19.017 Waste Bans.
2. Incorporate into 310 CMR ? – Proposed Mercury in Products Regulations.

Recommendation

BWP recommends incorporating the restriction on the disposal of mercury products into 310 CMR 70 - Proposed Mercury in Products Regulations for the following reasons:

1. 310 CMR 19 - Solid Waste Regulations apply to generators, haulers and facility operators. The Mercury Act specifically prohibits disposal of mercury products by generators and haulers, not facilities. Disposal facilities could claim that the Act never intended for them to be a regulated entity under the mercury products disposal prohibition.
2. Incorporating into 310 CMR 19 – Solid Waste Regulations would result in the need for every disposal facility in Massachusetts (200+) to amend its existing Waste Ban Compliance Plan. This would involve significant regional staff resources and Boston resources to revise the Waste Ban Plan Guidance.

3. Most mercury products are small items and/or products that are fragile (lamps). Imposing a ban on disposal at the facility level would be extremely difficult for facilities to administer with relatively little success.
4. Incorporating into 310 CMR 70 allows BWP to structure the disposal ban specifically on the targeted entities identified in the Act.



MassDEP Proposal to Pilot Retail Collection of Compact Fluorescent Light bulbs

MassDEP is interested in partnering with one or more retail locations for the collection of spent Compact Fluorescent Light bulbs (CFLs) from the residential sector.

In preparation for the ban on disposal of all mercury containing products included as part of the Mercury Management Act of 2006 and effective as of May 1, 2008, a build-out of the collection infrastructure will be necessary. Retail collection has been successful for other products (rechargeable batteries, cell phones, etc.), and for CFLs in other states. All CFLs collected would need to be recycled.

MassDEP is interested in identifying locations willing to run a 6-month pilot, providing an in-store location for the collection of CFLs. MassDEP is interested in working through program details with each retail collection location to determine the:

- method of collection, storage and shipping of CFLs for recycling
- method of promotion of the recycling service both internally and externally
- cost to the retail operation, e.g. staff, storage, and administration
- benefit to the retail operations, e.g. customer service, satisfaction and sales
- possible cost sharing strategies for the initiative.

MassDEP does not believe recycling costs should impede a pilot. The annual cost of CFL collection from seven municipalities, representing a combined population of 180,000 residents, actively publicizing collections was approximately \$800 in CY2006.